



## CLIMATE-SHIELD® TANK SHIELD

### DESCRIPTION

Climate-Shield® Tank Shield is a highly efficient, flexible protective coating, designed to lower the external surface temperature of storage vessels. It is non-toxic and friendly to the environment. It is completely washable and resists many harsh chemicals and dirt pick-up. This water-based coating is made from an acrylic resin system filled with microspheres. It can be obtained in a variety of architectural colors for signs and logo making. It leaves a beautiful matt finish but can be made glossy when coated with Climate-Shield® Clear Coat. Climate-Shield® Tank Shield reduces noise transmission and has an effective use range from -40 °C (-40 Deg F) to 204 °C (400 Deg F).

### TYPICAL USES

For the exterior of steel petroleum storage tanks and pipelines where the reduction of surface temperature is desired. Used also for the exterior of steel or polymer water tanks, grain storage silos and the exterior of most chemical storage tanks. This coating is resistant to 26 different harsh chemicals including 20% hydrochloric and 25% sulfuric acids.

### PRIMER

Use alkyd or epoxy quality primers where required and/or rust inhibitors to make sure rust will not be present during the application of the coating.

### SURFACE PREPARATION

All surfaces must be clean and free from rust, dust, dirt, oil or grease. Minimally, surfaces must be cleaned to remove any loose or chipped paint or any other foreign material prior to the application of Tank Shield. Rust should be controlled with the use of rust inhibitors.

### COLORS

White and any custom color available. Darker colors will give a correspondingly lower reflectivity.

### V.O.C.

<39.5 grams / liter

### THEORETICAL COVERAGE (2 to 3 Coats)

7 m<sup>2</sup> per gallon at 300 microns DFT (75 sf/gallon at 12 mills DFT) with no loss

### DRYING TIME

To set: 45 minutes / To re-coat: 12 hours / To through: 12 hours

At 24 °C (75 Deg F) and 50% relative humidity

### FLEXIBILITY

Coatings remain flexible at -50 Deg F (-45.6 °C). Eliminate thermal-shock damage.



Maintain their strength at 400 Deg F (204.44 °C).

#### ADHESION

Excellent adhesion to steel and a wide variety of substrates: wood, urethane foam, galvanized steel, aluminum, concrete, asbestos and many others.

#### MIXING

Stir each container thoroughly using low speed mechanical agitation to avoid air entrapment.

#### NUMBER OF COATS

Two to three coat application (minimum dry film-build of 380 microns with a minimum of 300 microns at any location) will give the best long term protection at minimum cost.

#### THINNING

None required. Clean water in small amounts of up to 0.24 Liter (1 cup) per gallon may be added to replace evaporation losses or to adjust for spray equipment configuration.

Caution: excessive thinning will cause the coating to lose adhesion and elasticity.

#### EQUIPMENT

Roller or airless spray application is recommended. Very small areas may be brushed.

When Climate-Shield® Tank Shield is applied by brush, three (3) coats are required for adequate protection.

Airless Sprayer: Apply all coats in the same direction. Do not cross spray. Cross spraying may reveal surface imperfections such as small undulations, etc.

Tip Orifice: 0.031 inches

Atomizing Pressure: 2200 – 2500 psi

Fan Spread: 60 Degrees

#### CLEAN UP

Clean tools and equipment with warm soapy water. Rinse with clean water; flush mineral spirits through spray equipment to prevent rusting and to lubricate packing and gaskets.

#### PACKAGING

5 gallon (18.9L) pails or Lined 55 gallon drums

#### STORAGE

Store at minimum 1 Deg C (33.8 Deg F) - maximum 30 Deg C (86 Deg F) DO NOT FREEZE

#### SHELF LIFE

Minimum 2 years (keep from freezing)



PRODUCT WARRANTY

5 to 15 year extendable LIMITED WARRANTY

The sole remedy for goods not in conformance with any warranty is replacement of the product or return of purchase price. SPM Thermo-Shield INC, shall not be liable for any other damages, including but not limited to labor expenses.

Contact:

SPM Thermo-Shield Inc.  
Naples, Florida 34113, USA

Phone: +1 239 234 5832  
Email: [spm@thermoshield.com](mailto:spm@thermoshield.com)